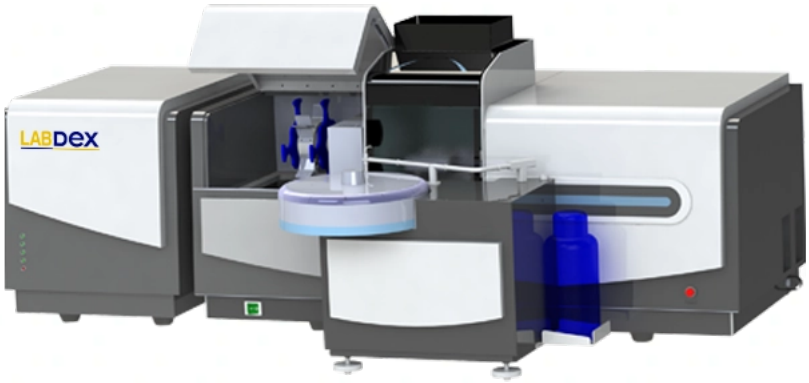

Atomic Absorption Spectrophotometer LX700AAS

Email: info@labdex.com **website:** www.labdex.com

Description

Atomic Absorption Spectrophotometer LX700AAS is designed for air-acetylene flame method analysis, flame emission method analysis and graphite furnace analysis etc. Equipped with unique light source system, with 8-lamp turret fully automatic change and optimization, supports 1 lamp working and 7 lamps preheating in the same time. Flame temperature is continuously adjustable between Room temperature~3000ºC, which makes it possible to choose the best atomization temperature. Flame will not pollute the environment and is not harmful for human bodies. It's a break-through in flame AAS analysis.

Specifications

Wavelength range	190-900nm
Wavelength accuracy	≤±0.25nm
Wavelength repeatability	≤0.15nm
Baseline stability	Static: Zero Drift of Baseline ≤0.005Abs/30min, Baseline transient noise≤0.001Abs Dynamic: Zero Drift of Baseline ≤0.005Abs/10min, Baseline transient noise≤0.005Abs
Background correction	D2 lamp background correction, with correction ability more than 30 times S-H background correction, with correction ability more than 30 times
Light source system	Eight-lamp position design Automatically rotating light stand that can be automatic switch and optimize Two lamp positions to support high-performance hollow cathode lamps Each lamp position can be lighted and preheated optionally

<table>
<tr><td>Optical System</td><td><table>
<tr><td>Monochromator</td><td>Single beam, Czerny-Turner design</td></tr>
<tr><td>Ruled density</td><td>1800 lines/mm</td></tr>
<tr><td>Blazed wavelength</td><td>250nm</td></tr>
<tr><td>Focal length</td><td>277mm</td></tr>
<tr><td>Spectral bandwidth</td><td>0.1nm, 0.2nm, 0.4nm, 0.8nm and 1.6nm (debugging slit) switching automatically</td></tr>
</table></td></tr>
<tr><td>Flame system</td><td>10cm Ti burner head for air-acetylene flame, emission burner provided
Burner head height and horizontal position automatic adjustment, with burner angle rotatable
Direct forming spray chamber with corrosion-resistant material PPS
Automatic ignition with high precision mass flow control system, realizing fully automated fuel gas flow control an adjustment</td></tr>
<tr><td>Graphite furnace</td><td><table>
<tr><td>Temperature range</td><td>Room temperature~3000°C</td></tr>
<tr><td>Heating rate</td><td>2500°C/s</td></tr>
<tr><td>Two temperature control modes</td><td>Optical and constant voltage. Both slope and stepped temperature programming are available</td></tr>
<tr><td>GF height</td><td>Fully automatic GF height and horizontal position setting and optimization</td></tr>
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<table>
<tr><td>Detection and Data processing system</td><td><table>
<tr><td>Analytical method</td><td>Working curve auto-fitting; Standard addition method; Automatic sensitivity correction; Automatic calculation of concentration and content</td></tr>
<tr><td>Repeat times</td><td>1~99 times, automatic calculation of mean value, standard deviation and relative standard deviation</td></tr>
<tr><td>Multi-task functions</td><td>Sequential determination of multi-elements in the same sample</td></tr>
<tr><td>Condition reading</td><td>With model function</td></tr>
<tr><td>Result printing</td><td>Measurement data and final analytical report printout, editing with Excel</td></tr>
<tr><td>Communication port</td><td>Standard RS-232 serial port communication</td></tr>
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<tr><td>Function expansion</td><td>Hydride vapor generator can be connected for hydride analysis</td></tr>
<tr><td>Dimension and weight (L x W x H)</td><td>Main unit: 1020 x 530 x 500 mm, 95 kgs
Graphite furnace: 350 x 550 x 430 mm, 35 kgs</td></tr>
<tr><td>Packing dimension (L x W x H) and Gross weight</td><td>Main unit: 1280 x 750 x 830 mm, 150 kgs
Graphite furnace: 660 x 600 x 800 mm, 70 kgs</td></tr>
</table>

Features

- Provided with automatic 8-lamp turret, automatic adjustment of lamp current and optimization of light beam position
- To perform flame emission analysis, flame emission burner head can be installed for alkali metals
- Parameters like Wavelength scanning, peak picking, change in spectral bandwidth, optimization of position parameters, automatic ignition and gas flow setting are done automatically
- Data processing system: provided with analytical methods – Working curve auto-fitting standard addition method, automatic sensitivity correction, automatic calculation of concentration and content with windows operating system software
- Experiments can be repeated 1~99 times along with automatic calculation of mean value, standard deviation and relative standard deviation

- Equipped with multi task functions- sequential determination of multi-elements in the same sample, condition reading- with model function and result printing- measured data and final analytical report printout in excel
- Provided with standard RS-232 serial port connection
- AAS analysis is made under windows operating system which is easy-to-use with fast parameter setting and optimization
- In order to increase the sensitivity in flame analysis, two high performance HCLs can be mounted on the lamp turret
- The D2 lamp and S-H background correction capability at 1A and 1.8A respectively is better than 30 times
- The optical system consisting of outer light path, C-T type grating monochromatic, and back light path, which is in the upper right of the instrument, is controlled by the computer
- Real-time monitoring of flame status, air pressure, etc. Automatically shutting off the gas circuit and alarm in abnormal status
- Equipped with alarm and automatic protection to fuel gas leakage, abnormal flow, insufficient air pressure and abnormal flame extinction in flame system
- Protection function and alarms for insufficient carrier gas and protective gas pressure, insufficient cooling rate supply and over-heating in graphite furnace system

Applications

- Used for testing the metal element concentration analyze in agriculture, chemical, environmental study, food, mining, and petrochemical, pharmaceutical industry.

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